REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

The rejection of claims 39-69 under 35 U.S.C. §103 as allegedly being made "obvious" based on Smith '224 in view of Tontiruttanonon '061 and Margulis '449 is respectfully traversed.

The claims have been amended to more clearly define the invention and to indicate that the network access control generates a per-line gap interval and estimate of the current rate at which traffic is admitted to the communications network, which is then adapted by each network access point according to the number of lines on which that respective network access point receives traffic seeking admittance to the network (see the specification generally including page 11:24-30, page 15:31-34, and page 16:20-21 for support).

Smith teaches an embodiment in which adaptive gapping is performed by traffic sources *each time the SCP tells its source that its congestion level has changed* (see 13:6-9). The adapted gap interval may be calculated by the source or alternatively at the server. However, at no point does Smith teach adapting the given gap interval in the claimed manner – e.g., nothing in Smith teaches a network access controller for calculating a global gapping constraint that is sent to a plurality of different access points for a communications network to trigger a local gapping technique in which

subsequent gap intervals differ from the initial gap interval for each determination of an overload condition being detected at the network access controller and in which the subsequent local gaps are determined by the number of lines feeding into a respective network access point.

Tontiruttananon teaches applying different gapping intervals during a given overload condition for a system. In Tontiruttananon, an initial gap size and a "Shred Rate" are defined for the system (see 5:53-54). For example, the initial gap length may be defined as 0.1 second so that traffic is blocked for the first 0.1 of each second (see 5:54-56). The shred rate defines how the initial gap length is to be increased, for example, if the initial gap length is 0.1 second, then the shred rate may be defined so the second gap length is 0.2 second. Each control decision instant that determines that the overload condition is maintained results in a gap interval being applied that increases the gap length of the previous gap interval by the shred rate (see 6:47-51).

Margulis controls mass calling events by a network platform broadcasting a gap control message to all switches in the network that specifies the terminating number (TN) and a standard initial call gap for the TN (e.g., 0.1 second) (see 5:48-52). To avoid network-wide call bursts at the end of each gap time, the first gap time in respect of a TN is randomized. In Margulis, when a switch in a given network X first receives a command to apply call gapping to a TN along with the initial gap time, the switch applies a random multiplier of between 0 and 1 to the initial gap time and loads this randomized

gap time to the gap timer (see block 130 of Figure 2B). Subsequently, the switch loads the actual gap times to the timer.

Accordingly, Smith generally teaches a central server instructing all of its traffic sources to apply an adaptive gap interval in the sense that the gap interval depends on the load of the central server each time the overload condition is determined at the central server, while Tontiruttananon generally teaches a traffic source locally applying a gap interval that varies according to the duration of an overload condition at that traffic source, and Margulis generally teaches a network platform broadcasting a gap control message to each traffic source and an initial standard gap which may be 0.1 second and then using a call gap timer. The traffic sources need to randomize the initial gap period in Margulis to ensure synchronization effects are removed at the network server.

The independent claims 39, 57 and 67 have been amended to make it clear that the global constraint information comprises a per-line gap interval and an estimate of the current rate per line derived from the aggregate rate at which traffic is offered to the network access controller and that while the first gap interval is imposed without waiting for a call to be received, subsequent call gaps are not imposed by a timer, but rather by waiting for subsequent calls to be received.

Nothing in the cited prior art teaches a network access controller for a communications network communicating a per-line gap interval to network access points so that each network access point imposes a call gap interval that is based on the number of

lines on which traffic arrives at the respective network access point seeking admittance to the communications network.

A person of ordinary skill in the art reading Smith learns that if the central server load is high, a longer gap interval should be applied than if the central server load is low. There is nothing in Smith to motivate such a person to consider the central server instead of communicating a per-line gap interval based on the aggregate traffic rate and the total number of lines providing access to the network for which that central server is acting as a network access controller.

Moreover, if a person of ordinary skill were to read Smith and consult Tontiruttanonon, nothing in Tontiruttananon would provide such motivation. Similarly, nothing in Margulis provides suitable motivation for a person of ordinary skill in the art to generate a per-line gap interval at a network access controller, which each network access point then adapts according to the number of lines along which they receive traffic.

In view of the fundamental deficiencies of all three references (whether considered singly or in combination) in respect of the above-discussed aspects of the independent claims, it is not necessary at this time to detail additional deficiencies of this allegedly "obvious" combination of references with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible to support

even a *prima facie* case of "obviousness" unless the cited prior art teaches or suggests each and every feature of each rejected claim.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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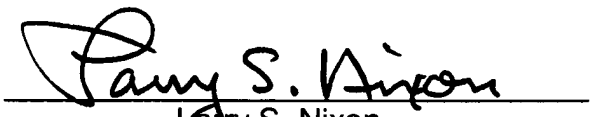
By: 
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